

# Procvičování:ECG (1. LF UK EN)/source

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            <li><b>QRS:</b> 80 ms</li>
            <li><b>Axis:</b> horizontal (borderline with left deviation)</li>
            <li><b>Pathology:</b> any, physiological curve</li>
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            <li><b>PQ:</b> 200 ms</li>
            <li><b>QRS:</b> 110 ms</li>
            <li><b>Axis:</b> left deviation</li>
            <li><b>Pathology:</b> left deviation, visible P mitrale (bifid P waves, in this case not prolonged according to standard),
non concordant T waves in limb leads, (higher T of this patient is caused by Digitalis medication)</li>
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            <li><b>PQ:</b> 160 ms</li>
            <li><b>QRS:</b> 80 ms</li>
            <li><b>Axis:</b> semivertical</li>
            <li><b>Pathology:</b> none, physiological curve (slight ST elevation in V3 is still physiological)</li>
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            <li><b>Regularity:</b> regular</li>
            <li><b>HR:</b> 50 min<sup>-1</sup></li>
            <li><b>PQ:</b> 160 ms</li>
            <li><b>QRS:</b> 80 ms</li>
            <li><b>Axis:</b> in actual fact, it is intermediate, because of badly attached leads, we find out that they do not correspond
(counting the axis from I and II gives other result than from I and aVF)</li>
            <li><b>Pathology:</b> sinus bradycardia, exchanged right and left hand electrodes, V1 and V5 exchanged as well (badly
attached precordial leads can be discovered according to the fact that the shape of the QRS complex changes suddenly between the leads,
whereas in a physiological curve, it changes gradually, as the leads are close to each other in the right order).</li>
            <li><b>Note:</b> Diagnosis of dextrocardia, which is sometimes confused with exchanged leads, can be made thanks to the
configuration similar to the one of the right ventricle (rQ) in all the precordial leads (as you can see it usually in V1 and V2 leads).
<i>The axis would be countable with left deviation, the leads would correspond.</i></li>
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          <![CDATA[<b>Normal ECG:</b> Regular sinus rhythm, HR 65/min. Regular sinus P waves (positive in leads I, II and III)
followed by QRS complexes. PQ interval 0,18 s, QRS complex 0,08 s, QT interval 0,4 s, heart axis +50°. T waves in precordial leads V2–V6
positive, in limb leads are oriented the same direction as the QRS complex. ST segment and T waves are without pathological changes.
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    <b>Abnormal ECG:</b> Regular <b>rhythm</b> with the frequency of 71/min, but <b>non sinus</b> (P waves regular, negative in
leads II and III), P waves followed by QRS complex. PQ interval 0,16 s, QRS complex 0,08 s, QT interval 0,48 s, heart axis +45°. T waves
in precordial leads V2-V6 positive, in limb leads have the same orientation as QRS complex. ST segment and T waves are without
pathological changes.
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waves), QRS complex 0,08 s, QT interval varies with the rhythm regularity from 0,3 to 0,4 s, heart axis +45°.
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<b>100/min.</b> PQ interval 0,16 s, QRS complex 0,08 s, QT interval 0,4 s, <b>heart axis -15°.</b> The recording is interrupted by
<b>premature ventricular complexes</b> (not preceded by a P wave) <b>0,14 s wide</b>, followed by secondary deviations of ST segment and
T wave. In general, <b>the rhythm is not regular</b>.
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          <li><b>Regularity:</b> irregular</li>
          <li><b>HR:</b> 50–100 min<sup>-1</sup></li>
          <li><b>PQ:</b> 160 ms (if present)</li>
          <li><b>QRS:</b> 80 ms</li>
          <li><b>Axis:</b> intermedial</li>
          <li><b>Pathology:</b> extrasinus premature ventricular complexes followed by a compensatory pause, flattened T in V4</li>
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          <li><b>Regularity:</b> regular</li>
          <li><b>HR:</b> 90 min<sup>-1</sup></li>
          <li><b>PQ:</b> not present</li>
          <li><b>QRS:</b> 130 ms</li>
          <li><b>Axis:</b> right deviation</li>
          <li><b>Pathology:</b> broad QRS complex, non sinus rhythm, heart rate borderline to tachycardia, splitted R in V1–V2, axis
deviation, negative T, stimulation artifacts</li>
          <li><b>Probable cause:</b> stimulated rhythm, RBBB, conduction pathologies</li>
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          <li><b>Regularity:</b> regular</li>
          <li><b>HR:</b> 55–60 min<sup>-1</sup></li>
          <li><b>PQ:</b> 200 ms</li>
          <li><b>QRS:</b> 80 ms</li>
          <li><b>Axis:</b> left deviation</li>
          <li><b>Pathology:</b> left deviation, HR borderline/bradycardia</li>
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          <li><b>PQ:</b> not present</li>
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<li><b>QRS:</b> 80 ms</li>
<li><b>Axis:</b> intermedial</li>
<li><b>Pathology:</b> Irregular rhythm, P wave not distinguishable</li>
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<li><b>PQ:</b> 160 ms</li>
<li><b>QRS:</b> 100 ms</li>
<li><b>Axis:</b> semivertical to vertical</li>
<li><b>Other:</b> early repolarisation syndrome (ST segment not isoelectrical, directly continuing to T wave, physiological
among young people), a rare physiological variant rr' in leads III and aVF.</li>
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<li><b>Regularity:</b> irregular</li>
<li><b>HR:</b> cca 300 min<sup>-1</sup></li>
<li><b>PQ:</b> none</li>
<li><b>QRS:</b> cannot be assessed</li>
<li><b>Axis:</b> cannot be assessed</li>
<li><b>Pravděpodobná příčina:</b> ventricular fibrillation</li>
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<li><b>QRS:</b> 80 ms</li>
<li><b>Axis:</b> semihorizontal</li>
<li><b>Pathology:</b> high QRS amplitudes in V2–V4, tachycardia</li>
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<li><b>PQ:</b> 160 ms</li>
<li><b>QRS:</b> 80 ms</li>
<li><b>Axis:</b> intermedial</li>
<li><b>Pathology:</b> Physiological ECG</li>
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<li><b>PQ:</b> 160 ms</li>
<li><b>QRS:</b> 100 ms</li>
<li><b>Axis:</b> semivertical to vertical</li>
<li><b>Pathology:</b> QRS complex in V1 has a shape of letter M (rSr'), slight (probably an unimportant ST elevation in V2, V2–
V5 QRS complexes with a higher amplitude, U wave</li>
<li><b>Pravděpodobná příčina:</b> iRBBB, possible ischemia on the right front side (V2 and V3 are difficult to asses in iRBBB),
overloaded left ventricle (sportsman), biphasic T</li>
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        <li><b>Regularity:</b> regular</li>
        <li><b>HR:</b> 75 min<sup>-1</sup></li>
        <li><b>PQ:</b> none</li>
        <li><b>QRS:</b> 160 ms</li>
        <li><b>Axis:</b> left deviation</li>
        <li><b>Pathology:</b> No P waves, broad pathological QRS complex in all leads, stimulation artifacts </li>
        <li><b>Probable cause:</b> Stimulated rhythm</li>
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        <li><b>PQ:</b> 160 ms</li>
        <li><b>QRS:</b> 110 ms</li>
        <li><b>Axis:</b> semivertical to vertical</li>
        <li><b>Pathology:</b> QRS complex in the shape of M in V1–V3, arrhythmia</li>
        <li><b>Probable cause:</b> iRBBB (rSr' configuration in V1–V3, pathology), respiratory arrhythmia (physiological)</li>
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## Zdroje